## **REMARKS**

This is in response to the Office Action dated October 19, 2004.

Claims 9 and 20 are amended. Claims 1-22, 56-65, and 73-77 are now pending in this application.

# Objections to the Claims

Claims 9 and 56-58 were objected to due to various informalities. Applicant has amended the claims to overcome this objection.

### Claim 9

Claim 9 has been amended to better describe the recited subject matter. Applicant believes that the amendment renders the objection to claim 9 moot.

Applicant respectfully requests reconsideration and allowance of claim 9.

### Claims 56-58

Applicant respectfully traverses the objection to claims 56-58. Claims 56-58 are objected to because of the alleged "'a first date' in line 7 of claim 56." Applicant is unable to find this alleged informality in claim 56 as filed with the Supplemental Amendment and Response filed on July 23, 2004, in response to the Advisory Action dated July 2, 2004 and the Final Office Action dated March 26, 2004. It is noted that a typographical error ("second data" misspelled as "second date") occurred in the Amendment and Response filed on May 25, 2004, in response to the Final Office Action dated March 26, 2004. However, this typographical error was corrected by amendment in the Supplemental Amendment and Response filed on July 23, 2004. A clarification of the objection is respectfully requested in the next official communication, or its withdrawal is believed to be appropriate.

Applicant respectfully requests reconsideration and allowance of claims 56-58.

# §103 Rejection of the Claims Using Carlson, Koestner, and Leahy

Claims 9-11, 13-16 and 19-22 were rejected under 35 USC § 103(a) as being unpatentable over Carlson et al. (U.S. Patent No. 5,792,195, hereinafter "Carlson") in view of

Koestner et al. (U.S. Patent No. 5,300,093, hereinafter "Koestner") and further in view of Leahy et al. (U.S. Patent No. 4,964,410, hereinafter "Leahy").

### Claim 9

Claim 9 has been amended to better describe the recited subject matter. Insofar as the rejection is applied to claim 9, Applicant respectfully traverses the rejection and submits that Carlson, Koestner, and Leahy do not provide the recited subject matter. For example, Applicant is unable to find that Carlson, Koestner, and Leahy teach or suggest, among other things, the second control circuit configured to receive the first data and the second data via the interface circuit, detect predetermined type heart sounds from the first data and predetermined type electrical cardiac events from the second data, calculate at least one timing difference between an electrical cardiac event of the predetermined type electrical cardiac events and a heart sound of the predetermined type heart sounds, and generate control signals causing the output device to simultaneously output at least the first sensed signals, the second sensed signals, and the at least one timing difference, as recited in claim 9.

Applicant respectfully requests reconsideration and allowance of claim 9.

## Claims 10, 11, 13-16, and 19

Applicant respectfully traverses the rejection of claims 10, 11, 13-16, and 19. Claims 10, 11, 13-16, and 19 are dependent on claim 9, which is believed to be patentable for at least the reasons stated above. Thus, the discussion above for claim 9 is hereby incorporated to support the patentability of claims 10, 11, 13-16, and 19.

Applicant respectfully requests reconsideration and allowance of claims 10, 11, 13-16, and 19.

#### Claim 20

Claim 20 has been amended to better describe the recited subject matter. Insofar as the rejection is applied to claim 20, Applicant respectfully traverses the rejection and submits that Carlson, Koestner, and Leahy do not provide the recited subject matter. For example, Applicant is unable to find that Carlson, Koestner, and Leahy teach or suggest, among other things, a

second control circuit configured to receive the first, second, and third data via the interface circuit, process the first data to detect predetermined type heart sounds, and generate control signals causing the output device to simultaneously output at least the first, second, and third sensed signals and visual indicia indicative of the detected predetermined type heart sounds and associated with locations of the predetermined type heart sounds in the first sensed signal, as recited in claim 20.

Applicant respectfully requests reconsideration and allowance of claim 20.

### Claims 21 and 22

Applicant respectfully traverses the rejection of claims 21 and 22. Claims 21 and 22 are dependent on claim 20, which is believed to be patentable for at least the reasons stated above. Thus, the discussion above for claim 20 is hereby incorporated to support the patentability of claims 20.

Applicant respectfully requests reconsideration and allowance of claims 21 and 22.

# §103 Rejection of the Claims Using Carlson, Koestner, Leahy, and Lekholm

Claim 12 was rejected under 35 USC § 103(a) as being unpatentable over Carlson in view of Koestner and Leahy, and further in view of Lekholm (U.S. Patent No. 4,763,646, hereinafter "Lekholm").

Applicant respectfully traverses the rejection of claim 12. Claim 12 is dependent on claim 9, which is believed to be patentable for at least the reasons stated above. Thus, the discussion above for claim 9 is hereby incorporated to support the patentability of claim 12.

Applicant respectfully requests reconsideration and allowance of claim 12.

# §103 Rejection of the Claims Using Carlson, Koestner, Leahy, and Tockman

Claim 17 was rejected under 35 USC § 103(a) as being unpatentable over Carlson in view of Koestner and Leahy, and further in view of Tockman et al. (U.S. Patent No. 5,540,727, hereinafter "Tockman").

Applicant respectfully traverses the rejection of claim 17. Claim 17 is dependent on claim 9, which is believed to be patentable for at least the reasons stated above. Thus, the discussion above for claim 9 is hereby incorporated to support the patentability of claim 17.

Applicant respectfully requests reconsideration and allowance of claim 17.

# §103 Rejection of the Claims Using Carlson, Koestner, Leahy, and Turcott

Claim 18 was rejected under 35 USC § 103(a) as being unpatentable over Carlson in view of Koestner and Leahy, and further in view of Turcott (U.S. Patent No. 6,409,675, hereinafter "Turcott").

Applicant respectfully traverses the rejection of claim 18. Claim 18 is dependent on claim 9, which is believed to be patentable for at least the reasons stated above. Thus, the discussion above for claim 9 is hereby incorporated to support the patentability of claim 18.

Applicant respectfully requests reconsideration and allowance of claim 18.

# Allowable Subject Matter

Applicant acknowledges the allowance of claims 1-8, 59-65 and 73-77.

Claims 56-58 were indicated to be allowable if rewritten or amended to overcome the minor informalities set forth in the Office Action.

For reasons discussed above in the remarks concerning the objection to claims 56-58, Applicant believes that claim 56-58 are in condition for allowance.

Applicant respectfully requests reconsideration and allowance of claims 56-58.

Serial Number: 09/833,229 Filing Date: April 11, 2001

Title: APPARATUS AND METHOD FOR OUTPUTTING HEART SOUNDS

### Conclusion

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6912 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date Jah. 17, 2005

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first of mail, in an envelope addressed to: MS Amendment, Commissioner of Patents, P.O. Box 1450,

Alexandria, VA 22313-1450, on this Aday of January, 2005.

Name

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